

Thai wild mushroom and Their Economic Potential (Oral Presentation)

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Introduction

Wild mushroom are traditionally used by many Asian communities for food and medicine. It has some effect for growth of forest tree that know as ectomycorrhizal. Most of them cannot culture to fruit like cultivated non-mycorrhizal mushroom. So the price is very high in season.

Objectives

The nutritive of sporocarps of popular edible wild mushroom from northern Thailand was determine. Optimal growth conditions (*in vitro*) of two potent economic were investigate.

Methods

Twelve popular wild mushroom were selected and chemical analysis. Hed Har (*Phaeogyroporus portentosus*) and Hed Phor (*Astraeus hygrometricus*) were evaluate for optimal condition for growth ie. : cultivation media, temperature, pH, salinity, solid substrte and frutification condition *in vitro*.

Results

Young *Astraeus* was high in ash content.but lowest fat. *P. portentosus* had a highest protein (24.2%) content. Mineral nutrient concentrations varies with fungal species. Mature *Astreus* has the highest concentration of Ca and Mg. The other micronutrient concentration across alml fungi were in order Fe>Zn>Mn>.Cu>B.>Se. Cu in sporocarp was higher than vegetable. Sugar composition : varied with fungal taxa. Frutification of Hed Har was sussess *in vitro* but Hed Phor was fail to fruit *in vitro*.

Conclusion

Hed Har and Hed Phor have high potential for development to industrial if frutification condition can be improved.

Keywords: wild mushroom, ectomycorrhizal fungi

Selected references

Sanmee, R., B. Dell, P. Lumyong, K. Izumori and S. Lumyong. 2003. Nutritive value of popular wild edible mushroom from northern Thailand. Food Chemistry 82:527-532.

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